86. In the East Khándesh division the rains held off early in the season, but later on they were profuse, and the Divisional Forest Officer reports favourably on natural reproduction, and remarks :—

"After ascending the main range of the Sátpudás near Panch-pándav in the Yával range a long stretch of wild country alternating with grassy plains and ravines clothed with dense forests, abruptly opens to the view of the spectator. This part of the Sátpuda forests, owing to its comparative inaccessibility from the markets in Sávda and Yával, appears to have enjoyed immunity from the frequent application of the axe of the privilege holders, and these forests are consequently stocked with good and valuable timber."

87. The Divisional Forest Officer of West Khándesh states "that the reproduction of teak in the Sátpudás is very fair, though hampered in all directions by forest fires, while the reproduction of teak and Anjan (Hardwickia) from the stools of the departmentally felled trees is, as a rule, excellent."

88. Mr. G. A. Hight, Deputy Conservator of Forests and Divisional Forest Officer of Násik, before leaving the country on the 25th March 1895, on special leave with a view to retirement from the service, left the following note with reference to the improvement of forest growth :—

"After having been away from the Deccan for about 15 years, I cannot help remarking a great improvement in the growth from what it was in the neighbouring district of Ahmednagar in 1878-79. One can no longer speak of absolutely bare hills containing nothing, but Euphorbia as a characteristic feature of the scenery in the Deccan. Almost everywhere growth has sprung up pretty thickly, and particularly in the Eastern part of the district, the beautiful and valuable Anjan is now very common. It may be that Násik was originally better wooded than Ahmednagar, still the trees have all the appearance of having grown in the last 15 years, owing not to closures, for I see no difference between closed lands and open ones, but to the stopping of cuttings."

This opinion is, of course, deserving of great respect, but the Conservator does not admit that closure against cattle has been so ineffective during the past fifteen years, and that the presence of young timber in the Násik reserves is owing entirely to the prevention of cutting and felling. If cattle had not been excluded to the extent they have been, the reboisement which Mr. Hight noticed would not have been anything approaching to what it is, and the Conservator states this unhesitatingly after 25 years' continued personal experience of the Deccan hills, and the working of forest conservancy management. Not only in the Násik district, but in every other district the advancing growth of timber is marked and conspicuous in places, but there are areas where the improvement has been so very slow as not to be noticeable readily by any person other than a Forest Officer experienced in the reboisement of denuded and degraded hill and other lands; and over-grazing is the cause of this slow progress.

89. In the exploited coupes of past seasons which have been closed and protected efficiently reproduction from the stools of the felled and removed trees is very vigorous and promising.

(2).—*Artificial Reproduction.*

90. Artificial plantations are required to be undertaken in respect of considerable tracts of denuded lands, where there are no trees, or an insufficient number of trees, to shed seeds and to cause natural reproduction under the bountiful provisions of Nature. The usual systems of artificial plantations, *viz.*, of raising seedlings in nurseries, of irrigated plantations, of ploughing the ground, dibbling and broadcasting were followed during the year, and the results have been as profitable as could be expected.

91. In the two divisions of Khándesh rains held off for a considerable time at the commencement of the season, and the late rains consequently retarded, to some extent, the planting and sowing operations. 1,725 acres were treated under the above methods in the Eastern division at a cost of Rs. 285, and 310 acres in the Western division at Rs. 1,239.

92. Cultural operations were undertaken in 3,422 acres including the area of coupes planted up, in the Násik division, and the total expenditure amounted

to Rs. 1,739. The Nándgaon range heads the list with 2,038 acres planted up. 10 acres were added to the Páthardi plantation in the Násik range.

93. In the Ahmednagar division 9,076 acres were treated in the usual manner, and the plantations at Dongargan and Hanmantgaon were kept up. The results on the whole were satisfactory. Sind Bábool seed planted during the year germinated freely. The total expenditure amounted to Rs. 1,575.

94. In the divisions of Poona, Sátára and Sholápur the usual systems were followed in sowing seeds, &c., and the results are, on the whole, satisfactory. Form No. 56 gives the details of all the works undertaken.

(3).—Early Thinnings.

95. No such operations were undertaken during the year.

(4).—Other Operations for the improvement of Growing Stock.

96. In the East Khándesh division the creeper known as the Pirul-veil belonging to the natural order Combretaciœ which thrives in black soil and climbing up trees spreads all over them in the Bábool forests, doing much damage, and even killing the trees, was cut down systematically, in Bhusával and Edlábád ranges. Salai (Boswellia) trees, where they are densely growing so as to suppress other and more valuable kinds, are also being cut out.

97. In the West Khándesh division considerable creeper cutting has taken place.

98. In the Násik division prickly-pear was eradicated from forest reserves of Niphád, Chandvad, Báglán and Kalvan ranges, and 297 acres were thus cleared of this noxious growth.

99. In the Ahmednagar division 264 acres of forest area were cleared of prickly-pear, and the Forest guards removed and destroyed 2,143 cart-loads of this weed, with their own hands.

100. In the Poona division the cutting of creepers was carried on by Forest guards in the heavier forests on the Ghats, free of cost, while the work of eradicating prickly-pear from Bábool reserves was carried on by hired labour and 46 acres were cleared.

101. Considerable cutting of prickly-pear and of creepers was undertaken in the Sátára division to improve the growing stock, and an expenditure of Rs. 1,637 was incurred on these operations.

102. In the Sholápur division 56,100 square feet were cleared of prickly-pear by paid labour, and in addition to this 3,900 cart-loads were destroyed by Beat guards.

(5).—Experiments.

103. The following kinds of seeds were obtained in small quantities from the Andaman Islands and from other parts and were distributed among the several divisions for experimental sowing :—

Lagerstrœmia parviflora,
Pterocarpus indicus,
Albezzia lebbek,
Pinus khasia,
Swietenia mairophylla,
Cupressus torulosa.
Sind Bábool;
Bambusa arundinacea.

but some of the seeds were not received up to the end of May 1895, and consequently had not germinated at the end of the year. The Sind Bábool seed has germinated freely. Pinus khasia planted in the Donza forests of the Poona division has grown to a height of 3 feet. Lagerstrœmia has only germinated in Násik, 2,000 seedlings of Bambusa arundinacea have been reared and transplanted into the Teak coupes in the Poona division. Experiment in coffee planting is being carried on at Lingmala in the Sátára division, and the plants are healthy.